

# BOLTON•PEREZ & Associates



Consulting Engineers

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## Bolton, Perez & Associates Wins Florida's Best in Construction Interchange Award

Bolton, Perez & Associates receives  
The Florida Transportation Builders' Association (FTBA) award for:  
Florida's Best in Construction Interchange 2007  
for SR-826 (Palmetto Expressway) at NW 36<sup>th</sup> Street  
This Outstanding FDOT Project was  
Presented for Quality Construction



Featured Left to Right: Jake Perez, PE-Bolton, Perez & Associates, Mario Cabrera, PE-FDOT District 6 Project Manager, Ignacio Halley, PE- FTBA, Felipe Porro-Astaldi Construction Corp., Stephanie C. Kopelousos, FDOT Secretary

### Summer / Fall 2008

#### Inside this issue:

BPA wins FTBA annual award	1
BPA Celebrates 10 Years	1
North Dade Residency FDOT District 6	1
97th Avenue Bridge Opens to Public	2
Carbon Fiber Used to Rein- force Metro Zoo's Monorail System	2
Plantation Key Update	2
Miami Int'l Airport Field Engi- neering Update	3
Hazardous Paint Removal over Miami River	3
FDOT and Miami-Dade County Qualifications	4

*As a Professional Engineer, I dedicate  
my professional knowledge and skill to  
the advancement and betterment of  
human welfare...*

*Engineers' Creed*

## 2008 Marks the 10th Anniversary of Bolton, Perez & Associates

Bolton, Perez & Associates celebrates its 10th anniversary this year. 2008 marks ten years in business and ten years as business partners for Joaquin (Jake) Perez, PE and John Bolton, PE.

As the company evolved and obtained Florida Department of Transportation, Miami-Dade and Broward County Qualifications, BPA quickly grew into a twenty employee multidiscipline engineering firm specializing primarily in transportation related engineering services including bridge design, roadway design, civil works, construction engineering inspection, and program and construction management.

### North Dade Residency Contract Reaches

### One Year

Florida Department of Transportation District Six Construction office welcomed two new Consultant Construction Engineering and Inspection (CCEI) Teams to support and augment the in-house staff in the North Miami-Dade Residency and the Marathon Operations Center in the Keys. The North Miami-Dade Residency, headed by Resident Engineer Ivan Hay, PE welcomed the CCEI Team of Bolton, Perez & Associates. John Bolton, P.E., of Bolton, Perez & Associates serves as the Senior Project Engineer managing a team supported by 3 Project Administrators, 2 Contract Support Specialists, and the full compliment of Sr. Inspectors, Inspectors and support staff.

FDOT utilizes The CEI Consultant Residency contract to manage numerous construction contracts ranging in value from \$ 500,000 up to \$ 6,000,000. The contract may include as many as 12 active projects at one time, including the fast response Pushbutton contracts. BPA is responsible for the overall performance and operation of this contract.



## Innovative Carbon Fiber is used to Repair Miami Metro Zoo's Aging Monorail



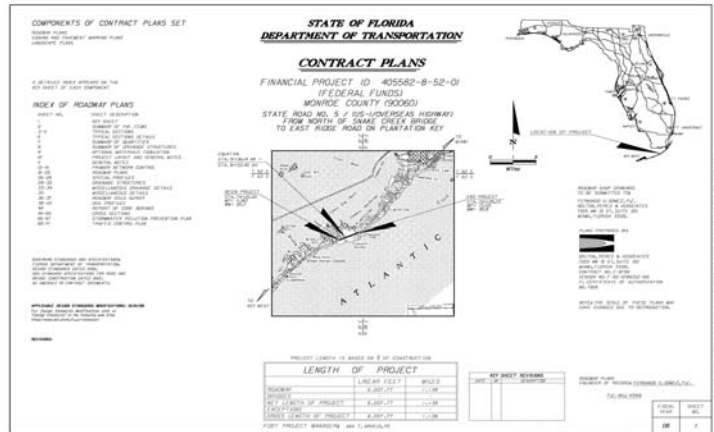
Application of Fiber Carbon Reinforced Polymer Straps

**Miami-Dade Parks and Recreations Department Extends Metro Zoo Monorail Pier Repair Services** - Following the successful development of contract documents and construction repairs of Pier No. 1, at Monorail Station No. 1, Miami-Dade County Parks and Recreations Department has extended our engineering services contract for BPA to develop the repair procedures for all the pier supports for all four Monorail Stations at Metro Zoo.

These repairs will follow a similar implementation of **Carbon Fiber Reinforced Polymer Straps** to strengthen the shear capacity of the existing pier caps. This solution proved to be a quick repair method that minimized visual impact to the existing structure and allowed the trains to maintain operations during the repair process.

## BPA Completes US-1 Project in Plantation Key

BPA recently completed the construction documents for the US-1 project in Plantation Key. Despite a major redesign requested by the FDOT after the 100% plans submittal phase, the project was completed without having to move the letting date. The 1.1-mile widening and resurfacing project incorporates center merge lanes in the vicinity of a truck weigh station. The purpose of the center merge lanes is to improve traffic operations and safety by providing vehicles turning left onto US-1 with an acceleration lane which will facilitate their entry into the stream of traffic. The project also added an ocean-side bike lane to complement the existing bay-side bike lane.



Together they form part of the Florida Keys Overseas Heritage Trail, an ambitious project to incorporate bicycle and pedestrian facilities from Key West to Key Largo. The project includes widening, resurfacing, cross slope correction, drainage, utility relocations, signing & marking, and tree protection. Construction is to begin in the fall of 2008 with an estimated construction cost of \$3M.

## NW 97th Avenue Bridge over SR 836 Opens to Traffic



On Friday, June 22, 2007, Commissioners Jose "Pepe" Diaz and Javier D. Souto cut the ribbon on a new roadway linking the communities of Doral and Sweetwater with Westchester and Fontainebleau. The recently completed N.W. 97th Avenue bridge, which crosses over SR 836/ Dolphin Expressway, provides a much-needed artery for traffic heading north and south. It is expected to alleviate traffic congestion on N.W. 87th Avenue and N.W. 107th Avenue. The project was completed in three years at a cost of \$15.8 M. **Bolton, Perez & Associates provided Construction Engineering Inspection Services for this high profile project.**



## Bolton Perez Provides Engineering and Inspection During Hazardous Paint Removal



As the agent for MDX, Bolton Perez & Associates (BPA) provided Construction Engineering and Inspection (CE&I) for the hazardous paint removal and painting of SR 836 Bridge (Northbound and Southbound) over the Miami River. The project was staffed with a full-time Coating Inspector (SSPC BCI Level 1 and NACE Level 1 Certified Coating Inspector) and a part-time Senior Coating Consultant (SSPC BCI Level 2, NACE Level 3 Certified Coating Inspector). In addition, CE&I support staff provided project administration and technical support through-out this six-month long project.

BPA performed quality assurance (QA) of all operations including hazardous waste handling, containment system monitoring, and the surface preparation of steel and paint application.

As part of the paint removal and coating application, the project included extensive concrete restoration of the bridge piers and caps.

Overall, the project was extremely challenging due to the hazardous paint removal and the close proximity to Jackson Memorial Hospital, Miami/Dade County Courthouse and the environmentally sensitive Miami River. BPA worked diligently with the Contractor to provide an on-schedule, high quality project with minimal impact to the public and ecological surroundings. The new three coat (zinc-epoxy-urethane) paint system on the steel superstructure and Class V-coated concrete substructure will be enjoyed by residents and visitors for years to come.



## Field Engineering Services at Miami International Airport



### Bolton Perez & Associates Assisting with Construction of American Airlines North Terminal Automated People Mover at the Miami International Airport.

Under a subcontract arrangement, BPA is providing construction inspection services and field engineering services for the construction of the Automated People Mover (APM) System at American Airlines North Terminal Program. The APM System consists of three stations and approximately a mile and a quarter of elevated light rail facility. The trains are electrically propelled and run on rubber tires.

The construction inspection services includes the guideway running surface construction, installation of the fixed directional rails and power rails, including incidental power *stinger* installations in the Maintenance Facility (shown in photo at left).

Our field engineering services include development of construction documents for numerous incidental construction items, including the stinger hanger system shown in the photo, hanging and attachment hardware for power and communication cable trays, emergency exit steps, guideway lighting supports, handicap access ramps, switch machine anchor bolts, and penetrations through the Maintenance Facility walls for electrical cable conduits.

**BOLTON-PEREZ**  
& Associates



Consulting Engineers

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BPA is a DBE/CBE firm with the following Florida Department of Transportation and Miami-Dade County Qualifications:

**FDOT Qualifications**

- Group 3 Highway Design – Roadway**  
3.1 Minor Highway Design
- Group 4 Highway Design – Bridges**  
4.1 Miscellaneous Structures and Minor Bridge Design  
4.1.1 Miscellaneous Structures  
4.1.2 Minor Bridge Design
- Group 5 Bridge Inspection**  
5.1 Conventional Bridge Inspection  
5.3 Complex Bridge Inspection  
5.4 Bridge Load Rating
- Group 7 Traffic Operations Design**  
7.1 Signing, Pavement Marking and Channelization  
7.3 Signalization
- Group 10 Construction Engineering Inspection**  
10.1 Roadway Construction Engineering Inspection  
10.3 Construction Materials Inspection  
10.4 Minor Bridge and Miscellaneous Structures CEI

**Miami-Dade County Qualifications:**

- 2.02 Mass Transit Feasibility & Technical Studies
- 3.01 Site Development and Parking Lot Design
- 3.02 Highway Design
- 3.03 Bridge Design
- 3.09 Signing, Pavement Marketing, and Channelization
- 3.11 Signalization
- 4.01 Aviation Systems-Engineering Design
- 6.01 W & S Systems-Water Dist & Sanitary Sewage Collection
- 6.02 W & S System-Major Water & Sewer Pumping Facilities
- 11.0 General Structural Engineering
- 16.0 General Civil Engineering
- 17.0 Engineering Construction Management